

Multiple Grow-Etch Cyclic Surface Treatment for Substrate Preparation

ABSTRACT OF THE DISCLOSURE

This invention provides a method for modifying the surface properties of a Si or Si alloy substrate by performing repeated etch-grow cycles of thermal oxide to yield a more defect free substrate with a more uniform nucleating surface which provides an improved interface for dielectric formation. Additionally, this method of processing does not expose the substrate to ambient atmosphere and preserves the improved surface until subsequent processing steps are performed.